FISHERIES
RESOURCE
CONSERVATION
COUNCIL

BUILDING THE BRIDGE

1997 CONSERVATION REQUIREMENTS FOR ATLANTIC GROUNDFISH

PRESENTATION TO ATLANTIC CAUCUS

OCTOBER 25, 1996

FRCC

REPORT LAYOUT

- Letter To The Minister
- Background

  Consultations
- Conservation Issues

  Managing Capacity
  Conseration Harvesting Plans
  Other Conservation Conserns

  Attitudinal Change
  Predator-Prey Relationship
  Sentinel Fisheries
  Emerging Fisheries and Minor Stocks
- Re-Opening Closed Fisheries

  How to Re-Open and Maintain a Sustainable Fishery?

  Practical Appliation
- Stock-By-Stock Recommendations
- Appendices

  Georges Bank Advice
  NAFO Advice

LETTER TO THE MINISTER AND BACKGROUND

REPORT AND CONSULTATIONS

- Council's fifth comprehensive report on conservation measures for Atlantic groundfish -- "Building the Bridge" from moratoria to sustainable harvest of fish stocks.
- Council conducted its consultations in September and October in the following locations:

  September 3: Matane, Québec
  September 4: Cap-aux-Meules, Québec
  September 4: Clarenville, Newfoundland
  September 5: Charlottetown, P.E.I.
  September 5: Harbour Breton, Newfoundland
  September 6: Tracadie, New Brunswick
  September 6: Deer Lake, Newfoundland
  September 6: Port Hawkesbury, Nova Scotia
  September 19: Dartmouth, Nova Scotia
  September 20: Yarmouth, Nova Scotia
  October 11: Halifax, Nova Scotia (Redfish only)

- Council remains concerned about the health of fish stocks and in no way should this report be interpreted as a "green light" to return to pre-moratoria levels and practices.
- during consultations, most stakeholders advocated a cautious approach for 1997 and called for fisheries to be closely monitored -- exception was strong pressures for a 20,000t TAC for 3Ps cod. "give fishermen what they need to make a living" "err on the side of fishermen"
- some industry and government leaders have been quick to jump on the recovery band wagon.
- noted some significant changes in practice and attitude in some areas and we applaud those who have worked to achieve these changes. However, this attitude is still not shared by all and much work remains to be done
- struck by the tremendous sense of frustration at the lack of specific answers in spite of significant efforts to provide the most relevant and up-to-date science for the FRCC. In 3Ps, it is not clear if enough information will be available in the foreseeable future to answer all concerns about the state of the stock.

NAFO

- encouraged by the advances made in management of NAFO stocks ,but we must not allow ourselves to become complacent with our recent successes.
- encourage the work of the NAFO working group on the Objection Procedure.
- there must be consistent conservation strategies inside and outside the 200 mile limit.
- entrench our observer programs and be diligent with our enforcement.
- increased mesh size and the ongoing work of the Scientific Council on protected juvenile areas and discards remain important initiatives for conservation
- Canada should continue to lead the way in promoting conservation measures and we urge you to be steadfast in your resolve on this point.

Conservation Issues

Overcapacity

- The Council recommends that special measures be taken to ensure that the available capacity is managed so that excess effort does not compromise conservation objectives at this critical juncture.

Effort Controls

- The FRCC recommends that the industry, FRCC, and DFO undertake a comprehensive and in-depth analysis of the use of direct effort control measures and test these measures further in pilot scale situations.
- To facilitate these discussions, the FRCC will release in the near future a Discussion Paper on Conservation Aspects of Quota and Effort Controls which will serve as a basis for these discussions.

Conservation Harvesting Plans

- The FRCC recommends that as fisheries re-open on a limited basis, the CHP process must be retained as a mandatory.
- In particular, the Council feels that the following components of the management regime must be strengthened beginning in 1997: small fish protocols, dumping and discarding, and area/time closures.

Monitoring, Control and Surveillance

- The FRCC again recommends that the penalties for those who cheat be significantly increased and rigidly enforced

By-Catch in Shrimp Fisheries

- The FRCC recommends that the use of the Nordmore grate be mandatory in all shrimp fisheries in Eastern Canada.
- Additionally, the Council recommends that further work be carried out in 1997 to reduce the by-catch levels of groundfish, especially that of juvenile redfish.

Recreational and Food Fisheries

- The FRCC recommends that in areas where moratoria still exist, there be no recreational or food fisheries.
- In areas where limited commercial fisheries have re-opened, any recreational or food fishery should be strictly monitored and effort controls be implemented (e.g. number of days, licensing requirements, limited number of tags per season) etc.

Attitudinal Change

- The FRCC recommends that fishermen, through their organizations, get more involved in management, get involved in joint scientific initiatives, continue efforts toward development of a conservation approach to our marine environment and guide others to see the need to do the same.
- In the end, all involved should adopt a code of conduct for responsible fishing.

Predator-Prey Relationships

- A precautionary approach to fisheries on "food" species and exercising prudent conservation measures in all fisheries that are at the base of the food chain e.g. herring, silver hake, sand lance, shrimp, etc. should be rigorously followed.
- The role these species play in the food chain should remain an important consideration in any management plan for commercial fisheries.
- The FRCC recommends that any fishery on these species be undertaken with extreme caution.

Krill

- The FRCC recommends that no additional dependence by industry on this food chain species be introduced, before more adequate information is available.
- The Council believes that a rapid expansion of such a fishery would violate the precautionary approach to emerging fisheries.

Capelin

- The FRCC recommends that the conservative approach to the management of this resource continue.
- This fishery should be carefully monitored to ensure that dumping and discarding are kept to a minimum and, infractions occurring for a certain gear type or sector lead to closure for the gear type or sector involved.
- The by-catch of juvenile cod must also be closely monitored and if large by-catches of cod are detected, then fishing by the offending gear should be stopped.

Seals

- The FRCC recommends that ways to increase harvests of harp, hooded and grey seals be pursued.
- Initiatives to encourage product development and identification of new markets should be encouraged.
- The alternative of contraception to limit the size of the herd should be implemented.

Sentinel Fisheries

- The FRCC recommends that the continuation of sentinel surveys where fishermen follow a scientific sampling protocol should be complemented by a program where fishermen fish in their normal commercial fashion but report more accurate information to scientists than is usually the case.
- The FRCC recommends that cooperative sentinel and index fishery programs should be encouraged between fishermen and DFO Science. Considering the shrinking of financial resources, a system of self-financing, science - industry initiatives, should be developed as part of the management plan.
- The FRCC recommends that, for stocks still under moratorium, sentinel fisheries should be expanded to include the offshore sector, particularly in the area 2J3KL, where information remains scarce.
- The Council is encouraged by the offshore sector's proposal of "tows for science" and believes it should be implemented.
- In addition, the FRCC recommends that DFO should encourage joint projects with fishermen whereby they take on more of the sampling and data collection role. Already, some fishermen are voluntarily tagging and releasing fish and some processors have offered to collect samples and otoliths from landings. Such initiatives should be encouraged and expanded.
- The role of fishermen in the scientific process should be enhanced well beyond that of data collector. Council is encouraged by the role many fishermen and their organizations have played in RAP sessions and we believe this should be further encouraged in all regions.

Emerging Fisheries and Minor Stocks

- These stocks require more attention then they have received in the past.
- Typically, this will mean greater limitations on fishing.
- The FRCC recommends that these science - industry initiatives on emerging species be expanded.

RE-OPENING CLOSED FISHERIES

HOW TO RE-OPEN AND MAINTAIN A SUSTAINABLE FISHERY?

- The first pillar of conservation is knowledge.
- FRCC attempted to identify, as indicators, those items of information which were most relevant to assessing stock status. Although these indicators play a foremost role in characterizing the status of the stock, they are all tainted with significant uncertainty and must be supplemented with any additional information available.
- Reduction of stock information to a handful of numbers is useful for general guidance, but it transforms a real fishery into an abstract concept which alienates scientists from fishermen.
- The information presented by fishermen is generally qualitative and site-specific, and unsuitable for systematic stock assessment.
- Neither re-opening nor the continued management of the fishery are reducible to simple formulas or to one-sided considerations.
- Conservation decisions require real input from all sources of information.
- The second pillar of conservation is the approach adopted to manage and carry out the fishery, which determine how knowledge and its uncertainty are used.
- The approach adopted by the FRCC is the "precautionary approach", recommended by the United Nations (Conference on Straddling Fish Stocks, 1995) in dealing with cases where information is uncertain, unreliable or inadequate.
- The precautionary approach favours management measures which minimize the risk of undesired outcomes.

Practical Application

Precautionary Approach

- The precautionary approach used has consisted of:
  1. basing the recommendation to re-open on the strength of biological indicators;
  2. taking into account uncertainty about stock status;
  3 opening only at a level which ensures continued rebuilding;
  4. insisting on a solid assurance of management control.

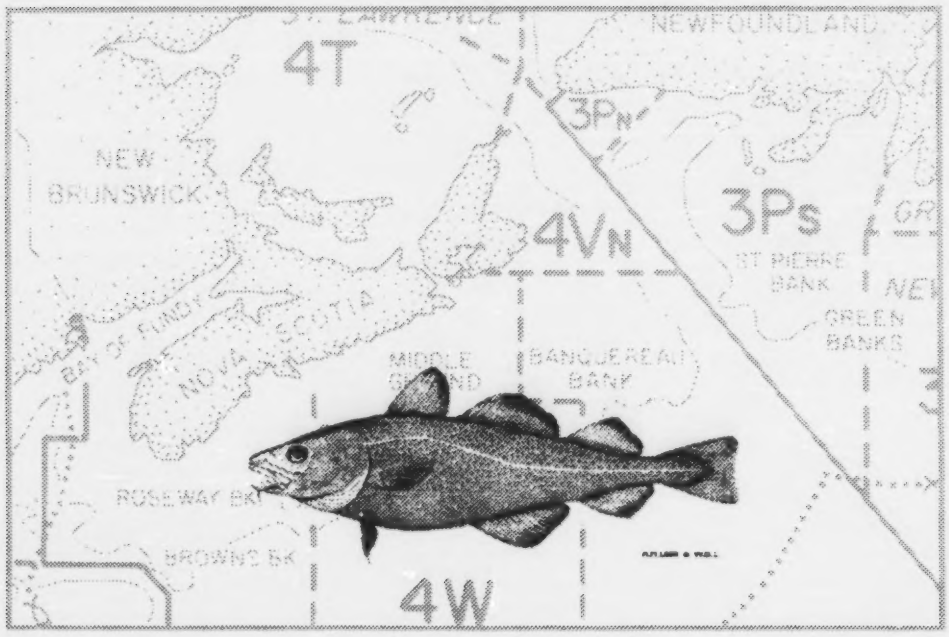
Conservation Harvesting Plans

- The FRCC recommends that Conservation Harvesting Plans should include the following components (among others):
  1. matching the effort to the available resource;
  2. seasonal catch repartition where appropriate;
  3. extensive and timely monitoring through a combination of measures: log-books, observers at sea, dock-side monitoring;
  4. use of gear with appropriate selectivity to avoid catching juveniles and spread the catch over a range of year classes;
  5. by-catch provisions;
  6. small fish protocols;
  7. suitable seasonal and area closures to protect juveniles, pre-spawning and spawning aggregations;
  8. mechanisms for mid-season and end of season evaluation of the fishery;
  9. provision for gathering information about fish stocks.
- The FRCC recommends that for freshly re-opened fisheries, these plans will have to be particularly explicit and subject to close monitoring and strict enforcement.

STOCK-BY-STOCK RECOMMENDATIONS

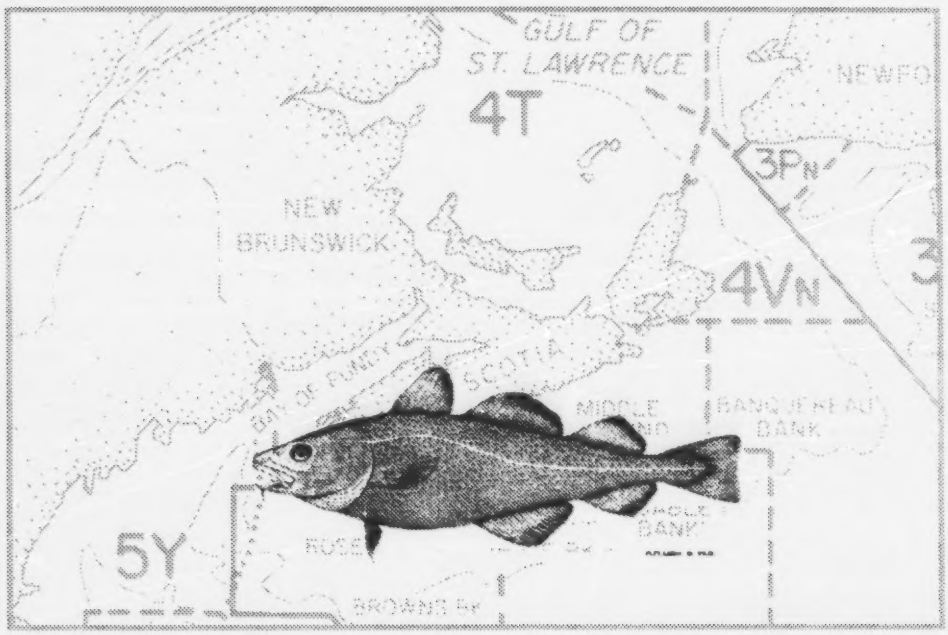
3Ps COD

- substantial increases in sentinel survey catches, high by-catches of cod in other fisheries, reports of inshore abundance from fishermen
- Stock Status Report estimates inshore biomass at 100,000t -- offshore index remains low
- strong 1989 year class, and average 1990 year class: subsequent year classes weaker
- environmental conditions improving, increases in water temperature
- FRCC recommends TAC be set at 10,000t for 1997, to be divided quarterly
- strict Conservation Harvesting Plan required
- critical need for more information from Science and from industry on this stock -- investigate discrepancies between inshore and offshore indices -- may be composed of 5 sub-stocks
- need for offshore "sentinel" survey



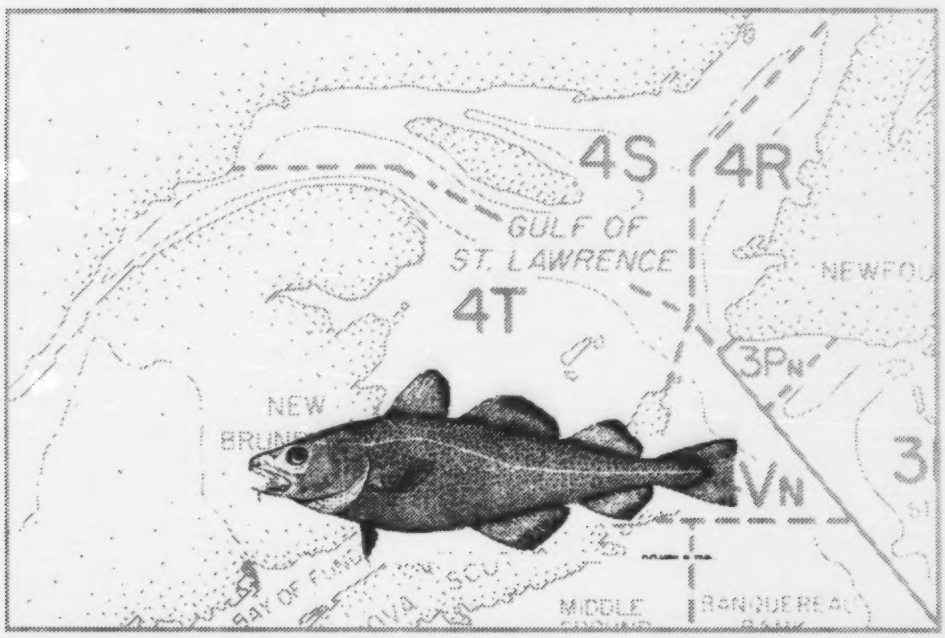
4T, 4VN COD

- sentinel survey catches improved over 1995 in many areas
- early signs of improvement in recruitment -- stock rebuilding but still at low level
- limited geographical distribution, environmental factors still depressed (cold water)
- FRCC recommends TAC be set at 6,000t for 1997: well below F0.1 -- to enhance chances of rebuilding
- strict Conservation Harvesting Plan required, including controls on fishing capacity
- limited reopening should provide better data on the actual stock status



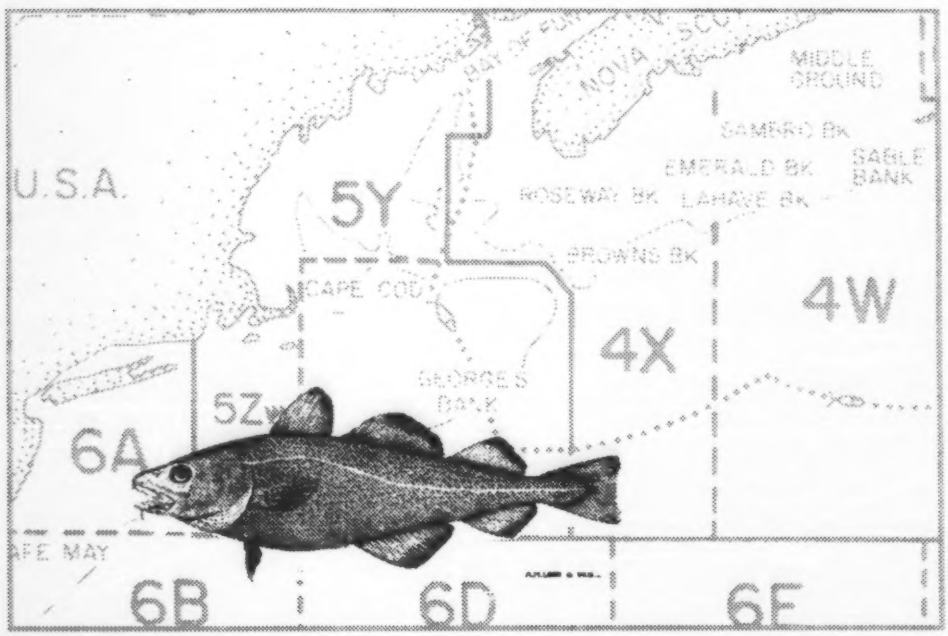
3PN4RS COD

- sentinel survey catches much improved over 1995
- stock rebuilding at low level with limited improvement
- improved age structure and condition; growth back to normal; environmental conditions improving
- some signs that the 1993 year class will be good, while earlier year classes ('91, '92) are weak
- FRCC recommends TAC be set at 6,000t: sets conditions for rebuilding
- strict Conservation Harvesting Plan required, including controls on fishing capacity
- small scale reopening will provide better data on actual stock status



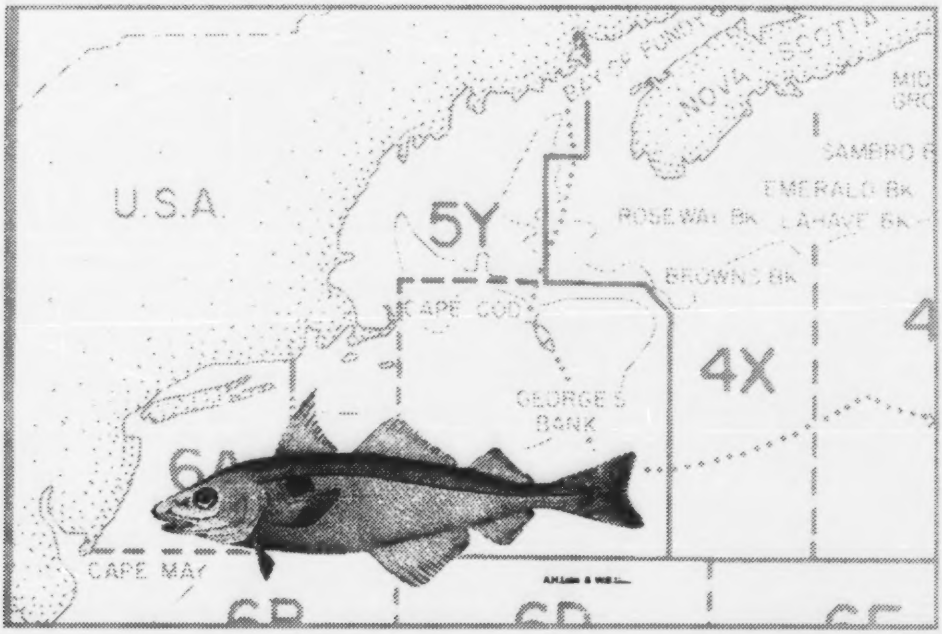
4X Cod

- strong 1992 year class, recruitment is good, and geographical distribution is expanding
- biomass level is comparable to 1982-83
- growth is attributable to lower fishing mortality and 1992 year class
- Council still concerned about dumping and discarding
- FRCC recommends TAC be set at 13,000t for 1997 (1996 TAC was 11,000)
- mandatory dockside monitoring for all gear types



4X HADDOCK

- spawning biomass is starting to increase but still below average
- 1993 and 1994 year classes are strong
- abundance of haddock in summer survey second highest since 1970
- FRCC recommends TAC be set at 6,700t (1996 TAC was 6,500t)
- mandatory dockside monitoring for all gear sectors
- appropriate measures be taken to ensure protection for incoming year classes



4VWX5ZC POLLOCK

- spawning biomass is starting to show signs of recovery and is near average
- 1989 year class is strong, subsequent year classes weak
- reports of abundance throughout Bay of Fundy but absence of small fish
- degree of uncertainty with the assessment and fishermen were very cautious in seeking increase
- FRCC recommends TAC be set at 15,000t (1996 TAC was 10,000t)
- appropriate measures be taken to establish closed areas to protect spawning stock
- DFO Science should look at other indicators of abundance